

Having thus described the invention, the following is claimed:

1. A stator winding for mounting on an electric motor having a rotor mounted for rotation about a longitudinal axis within an outlying stator, said stator winding comprising:

a base having a leg with longitudinally spaced front and rear ends, radially outer and inner ends, and first and second circumferentially opposite sides;

5 an electrical conductor coil circling said base around said sides and said front and rear ends;
and,

mounting means on said base and said stator for slidably mounting said winding on said stator core.

2. The stator winding of claim 1, wherein said mounting means on said base is spaced radially outwardly from said radially inner end of said leg.

3. The stator winding of claim 2, wherein said mounting means on said base includes a connection portion on said radially outer end of said leg having radially spaced outer and inner ends and longitudinally spaced first and second ends, said connection portion being adapted to slidably engage a corresponding slot in said stator.

4. The stator winding of claim 3, further including a pole cap at said radially inner end of said leg.

5. The stator winding of claim 4, wherein said pole cap is a flange extending circumferentially outwardly from opposite sides of said leg at said radially inner end of said leg.
6. The stator winding of claim 5, wherein said pole cap is removably mounted on said leg.
7. The stator winding of claim 1, wherein said mounting means on said base includes a connection portion on said radially outer end of said leg having radially spaced outer and inner ends and longitudinally spaced first and second ends, said connection portion being adapted to slidingly engage a corresponding slot in said stator.
8. The stator winding of claim 3, wherein said connection portion includes a circumferential protrusion with circumferentially opposite sides spaced radially outwardly from said radially inner end of said connection portion, at least one of said circumferentially opposite sides of said protrusion extending circumferentially outwardly beyond one of said first and second circumferentially opposite sides of said leg.
9. The stator winding of claim 8, wherein said connection portion is circumferentially wider at one of said longitudinally spaced first and second ends than at the other of said ends with a tapered longitudinal profile therebetween.

10. The stator winding of claim 3, wherein said connection portion is circumferentially wider at one of said longitudinally spaced first and second ends than at the other of said ends.
11. The stator winding of claim 7, wherein said connection portion has a trapezoidal profile in cross section.
12. The stator winding of claim 7, wherein said connection portion has a T-shaped profile in cross section.
13. The stator winding of claim 7, wherein said connection portion has a Y-shaped profile in cross section.
14. The stator winding of claim 1, wherein said mounting means includes a connection portion on said base having a cross sectional profile and a slot in said stator core having a cross sectional profile corresponding with said cross sectional profile of said connection portion.
15. The stator winding of claim 14, wherein said connection portion is spaced radially outwardly from said radially inner end of said leg.
16. The stator winding of claim 1, wherein said mounting means includes a connection portion on said leg and a longitudinally extending slot in said stator adapted to slidably receive said

connection portion, said connection portion and said slot including interengaging abutment surfaces adapted to prevent radial disengagement of said stator winding from said stator.

17. A method of assembling a stator winding on the stator core of an electric motor having a rotor mounted for rotation about a longitudinal axis within an outlying stator, comprising:

- providing a base having a leg with longitudinally spaced front and rear ends, radially outer and inner ends, and first and second circumferentially opposite sides;
- providing a slot in said stator;
- providing a connection portion on said base adapted to slidably engage said slot;
- winding an electrical conductor around said front and rear ends and said sides of said leg to provide a coil; and
- slidingly interengaging said connection portion and said slot.

18. The method of claim 17, further including providing said connection portion with radially outer and inner ends and longitudinally spaced first and second ends.

19. The method of claim 18, further including providing said connection portion with a circumferential protrusion with circumferentially opposite sides spaced radially outwardly from said radially inner end of said connection portion, at least one of said circumferentially opposite sides of said protrusion extending circumferentially beyond one of said first and second circumferentially opposite sides of said leg.

20. The method of claim 18, further including providing said connection portion with a tapered longitudinal profile whereby said connection portion is circumferentially wider at one of said longitudinally spaced first and second ends than at the other of said ends.

21. The method of claim 19, further including providing said connection portion with a tapered longitudinal profile whereby said connection portion is circumferentially wider at one of said longitudinally spaced first and second ends than at the other of said ends.

22. The method of claim 17, further including providing a pole cap on said radially inner end of said leg.

23. A stator winding for mounting on an electric machine having a rotor mounted for rotation about a longitudinal axis within an outlying stator, said stator winding comprising:

a base including longitudinally spaced front and rear ends, a radially extending leg with radially outer and inner ends and circumferentially opposite sides, and a cross member spaced radially outwardly from said radially inner end of said leg;

an electrical conductor encircling said leg around said sides and said front and rear ends; and, mounting means on said stator and said base for slidably mounting said winding on said stator.

24. The stator winding of claim 23, wherein said mounting means includes a

longitudinally extending slot in said stator adapted to slidingly receive said cross member.

25. The stator winding of claim 24, wherein said base further includes a pole cap mounted on said radially inner end of said leg.

26. The stator winding of claim 24, wherein said pole cap further includes a flange extending from said leg in circumferentially opposite directions.

27. The stator winding of claim 24, wherein said cross member has longitudinally spaced first and second ends.

28. The stator winding of claim 27, wherein said cross member is circumferentially wider at one of said first and second ends of said cross member than at the other said end.

29. The stator winding of claim 28, wherein said cross member has a longitudinally tapered profile between said first and second ends of said cross member.

Ad A37